



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,742	06/21/2001	Emerson Keith Colyer	IN-5486	6026

26922 7590 08/28/2002

BASF CORPORATION
ANNE GERRY SABOURIN
26701 TELEGRAPH ROAD
SOUTHFIELD, MI 48034-2442

EXAMINER
ZALUKAEVA, TATYANA

ART UNIT	PAPER NUMBER
1713	4

DATE MAILED: 08/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/886,742	COLYER ET AL.
	Examiner Tatyana Zalukaeva	Art Unit 1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 21 June 2001.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-33 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-33 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-17, 24-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Rockrath et al (U.S. 5,716,678).

Rockrath discloses a clear coating composition and method of a production of two-coat finish on a substrate, a transparent lacquer composition containing a hydroxyl group-containing polyacrylate resin produced by polymerizing

(a) 10 to 51% by weight 4-hydroxy-n-butylacrylate or 4-hydroxy-n-butylmethacrylate or a mixture of 4-hydroxy-n-butylacrylate and 4-hydroxy-n-butylmethacrylate;

(b) 0 to 36% by weight of a hydroxyl group-containing ester of acrylic acid different from (a) or a hydroxyl group-containing ester of methacrylic acid or a mixture of such monomers;

(c) 28 to 85% by weight of an aliphatic or cycloaliphatic ester of methacrylic acid different from (a) and (b) with at least 4 C atoms in the alcohol residue or a mixture of such monomers;

Art Unit: 1713

(d) 0 to 3% by weight of an ethylenically unsaturated carboxylic acid or a mixture of ethylenically unsaturated carboxylic acids and

(e) 0 to 20% by weight of an ethylenically unsaturated monomer different from (a), (b), (c) and (d) or a mixture

of such monomers, into a polyacrylate resin with a hydroxyl number from 60 to 200 number average molecular weight from 1,500 to 10,000.(abstract). Component (b) is described in column 4, lines 28-40. The topcoat composition contains transparent pigments (column 7, lines 17, 18). Cyclohexyl methacrylate is named as a cycloaliphatic comonomer in column 4, line 58. The amount of cyclic monomer is 28-85% weight (see abstract), which is within the range of claims 1, 10 and 11.

It is possible to employ a crosslinking compound (B), which are preferably derived from diisocyanates and contain isocyanurate groups (column 5, lines 49-56).

The process of refinishing substrate is disclosed in column 9, lines 40-53. Such steel panels coated with a commercial electro-deposition coating and a commercial filler are spray-coated with a commercial, nonaqueous basecoat which contains aluminum pigment, are dried for 5 minutes at room temperature and then are coated over with the transparent topcoats. After a further drying time of 5 minutes at room temperature, the basecoat and topcoat are baked together for 20 minutes at 140°C in a circulating-air oven. The resulting finishes are distinguished by a high degree of hardness, high gloss, good adhesion between basecoat and topcoat and good topcoat appearance.

With regard to the limitation of the instant claims of a viscosity expressed in Stokes it is a base presumption, that since the compositions of the instant claims and both Rockrath and Rink are identical and are made by essentially the same method, the properties even if not taught will be inherently the same. Products of identical chemical composition cannot have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore if the prior art teaches the identical chemical structure, the properties and characteristics applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705,709,15 USPQ2d 1655,1658 (Fed. Cir. 1990). Consult also *In re Fitzgerald*. In other words when the claimed compositions are not novel, they are not rendered patentable by recitation of properties, whether or not these properties are shown or suggested in prior art.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

Art Unit: 1713

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rink et al (U.S. 5,759,631) in view of Jouck et al (U.S. 5,322,715).

Rink discloses a refinish clear coating composition comprising

(A) at least one hydroxyl group-containing polyacrylate resin obtained by polymerizing

(a) **from 5 to 80% by weight of a cycloaliphatic ester** of methacrylic acid and/or acrylic acid, or a mixture of such monomers,

(b) **from 10 to 50% by weight of a hydroxyl group-containing alkyl ester of methacrylic acid and/or acrylic acid, or mixtures of such monomers,**

(c) from 0 to 25% by weight of a hydroxyl group-containing, ethylenically unsaturated monomer, different from (a) and (b),

or a mixture of such monomers,

Art Unit: 1713

(d) from 5 to 80% by weight of an aliphatic ester of methacrylic and/or acrylic acid, different from (a)-(c), or a mixture of such monomers,

(e) from 0 to 40% by weight of an aromatic vinyl hydrocarbon, different from (a)-(d), or a mixture of such monomers, and

(f) from 0 to 40% by weight of an additional ethylenically unsaturated monomer, different from (a)-(e), or a mixture of such monomers, and

(B) at least one crosslinking agent. (see abstract).

The number average molecular weight is 1000 –5000 (column 2, lines 20-25).

Weight average $M_w = M_n \times$ polydispersity, which is said to be lower than 5 (column 2, line 23) , preferably from 1.8 to 4 (column 3, lines 16-20). Thus inherently $M_w = 5,000 \times 4 = 20,000$, which satisfies the limitations of claims 1 and 5. The hydroxyl number of a polymer is 60-180 mg of KOH/g, which meets the limitation of the instant claim 9.

Monomers (d) and (e) described in column 5, lines 25-43 satisfy the requirements of claim 10.

Sterically hindered amines, i.e. the compounds containing amine functionality are added into composition of Rink (see Table 3 in column 12).

With specific regard to claims 18 and 19 Rink discloses that a coating composition employs crosslinking agent (B), which is selected from the group consisting of at least one **diisocyanate, polyisocyanate which contains isocyanurate** groups, and mixtures thereof. (see claim 11).

With regard to the process of coating Rink discloses the process summarized in claim 12, which is the process of the instant claim. The clear coating composition of

Rink is designed for VOLVO. The base color used was a mixture of the commercial base colours from BASF L+F, (Munster-Hiltrup, Germany) series 54. A mixture of 80 parts by weight. 54M 99/9 Basisfarbe (base color) Aluminium superfine and 20 parts by weight 54M 552 Basisfarbe [base color] Helioblau was used.

The disclosure of Rink differs from the instant claim 1 by disclosing the range of number average molecular weight up to 5,000 compare to 6,000 as claimed.

However, the weight average molecular weight of Rink based on the disclosed polydispersity is within the claimed range, and therefore, since the polydispersity of the claimed polymers are not elucidated by the instant claims and specification, a person skilled in the art would have found it obvious to adjust the molecular weight of Rink polymers the 6,000 by, for example, varying the amount of initiator, motivated by suggestion of Rink to utilize different initiators and molecular weight regulators, with the reasonable expectation of success.

The disclosure of Rink differs from the instant claims 18-23 by not disclosing the specific pigments dispersed by polymers, such as carbon black.

Jouck (u.S. 5,322,715) discloses multicoat coating composition, which contains an emulsion polymer as a film forming material. The basecoat coating compositions according to Jouck' invention may contain as pigments inorganic colored pigments

Art Unit: 1713

such as, for example, titanium dioxide, iron oxide, carbon black etc., organic colored pigments as well as the customary metal pigments (for example, commercial aluminum bronzes, stainless steel bronzes . . .) and non-metallic effect pigments (for example nacreous luster pigments and interference pigments). The basecoat coating compositions preferably contain metal pigments and/or effect pigments. The degree of pigmentation lies within the customary range, preferably 0 to 10% by weight, based on the total weight of the basecoat coating composition (column 12, lines 34-46).

It would have been found obvious by a person skilled in the art to add the pigments as taught by Jouck to the composition of Rink to achieve desirable colors while maintaining the beneficial properties of Rink's composition.

6. Claims 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rockrath in view of Yamamoto (U.S. 5,244,979) or Louck (u.S. 5,322,715), each one individually.

Rockerath is silent about the use of pigments dispersed by amine containing polymer, specifically carbon black pigment.

Yamamoto teaches dispersing agent for paints comprising acrylic polymer, heterocyclic amine containing polyester (abstract) and pigment. As a dispersing resin to be applied, use may be made of alkid resin, oil-free polyester resin, acrylic resin, epoxy resin, polyurethane resin, silicone resin, fluorine resin, **melamine resin**, **benzoguanamine resin**, urea resin and the like. Further, as an objective pigment, mention may be made of inorganic pigments such as titanium dioxide, zinc oxide, cadmium sulfide, iron oxide, calcium carbonate, red lead, zinc

sulfide, barium sulfate, barium carbonate, clay, talc, chrome yellow, carbon black and the like; organic pigments such as azo series, diazo series, condensed diazo series, thioindigo series, indanthrone series, anthraquinone series, benzimidazolone series, etc.

Thus, a skilled artisan would have found it obvious to employ pigments and dispersing agents of Yamamoto in the composition of Rockrath dispersed in the Yamamoto's resins to achieve an effect of improving the pigment dispersibility against these pigments and produce a desirable color of a coating composition without sacrificing its properties.

It would have also be found obvious by a skilled artisan to employ pigments and dispersing agents of Louck, as per reasons discussed above in paragraph 5 of the present Office Action.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-17, 24-35 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-23 of copending Application No. 09/850,837 and claims 1-21 of copending Application 09/09/965,423. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both claim clear coating composition comprising identical ingredients wherein the ranges of those components overlap with the ranges as instantly claimed.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. The other prior art cited in PTOL-892 shows the general state of art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tatyana Zalukaeva whose telephone number is (703) 308-8819. The examiner can normally be reached on 9:00 - 5:30.

Art Unit: 1713

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703) 308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

Tatyana Zalukaeva
Examiner
Art Unit 1713


August 17, 2002